### **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



## VICKS MAGAZINE

VOL. 20

ROCHESTER, N. Y., FEBRUARY, 1897

No. 4

#### NATIVE TREES AND FLOWERS OF NORTH GEORGIA.

like the other magnolias.

THE trees, shrubs and wild flowers of North Georgia are very interesting and beautiful, and are worthy of more attention than has been bestowed upon them. In the original forests there are grand old trees of oak, pine, elm, ash, poplar, and hickory, also the more ornamental trees such as cedar, willow, locust, maple, sweet gum, dogwood, black haw, wild crab-apple, red-bud tree (Cercis Canadensis), and cucumber tree (Magnolia acuminata).

A well grown specimen of the cucumber tree is very imposing in appearance with its large whorl of leaves at the tips of every limb, the leaves often measuring twelve to eighteen inches in length. It blooms in the spring, the flowers are large, cream color, and six to eight inches across, but are not sweet scented

The red-bud tree also blooms in the spring before the leaves appear. When in bloom it is a cloud of purple-red, pea-shaped flowers, and is very gay and attractive. The large flowering dogwood is very commoa here, and in the spring the trees are completely covered with their pure white blossoms. The dogwood trees are no less beautiful when, in the fall, their abundant foliage has turned to a dark bronze red, and the trees are covered with brilliant clusters of red berries.

The red flowered maple is also very attractive when in bloom, and in the fall when fully mature, the foliage of the different varieties of maple makes a very brilliant display

indeed, some varieties having bright, solid crimson foliage, while others change to a lovely golden yellow. The foliage of the sweet gum tree in autumn closely resembles the sugar maple of the north.

Among the most beautiful of the wild flowers are the azaleas; the

flowers grow in large clusters surrounded by a whorl of dark green leaves, and are exquisite in color, and very fragrant. The different colors of the flowers are red, pink, white, orange and pale yellow, while some of them are variegated. The honey-suckle, bearing yellow and white flowers, blooms early in

spring and is very common here. But among the first flowers to greet us comes the violet, which carpets the ground in every direction with its dainty blue flowers. We have two varieties, the common blue violet and Viola pedata bearing larger flowers and of richer color. Growing in the woods we find a small species of the iris family, bearing delicate and exceedingly pretty pale

We have two varieties of the oxalis, one bearing pink blossoms while the other has pretty lavender-tinted flowers. Morning glories we find growing everywhere, in the fields, by the road side and in the door yards; some of them have pure white flowers, others white with a pink center. Another variety has lovely blue flowers and the leaves closely resemble those of the new Japanese



SPICE BUSH-CALYCANTHUS.

morning glories. The passion flower grows profusely wherever the ground has been cultivated and is something of a nuisance, as it persists in growing where it is not wanted. The flowers are purple and white and very fragrant. Not so common yet frequently seen is the centrosema vine, and its large purple flowers flecked with white are indeed charming; they resemble an

and August the trumpet vine is beautiful with its clusters of large orange-red flowers. We also have the cross-vine similar to the above but not so showy.

We have a clematis vine commonly



LOBELIA CARDINALIS.

called "Virgin's Bower," bearing small, white, sweet-scented flowers.

Calycanthus floridus, popularly known as "sweet shrub," grows in the woods, its odd chocolate-colored flowers filling the air with their fragrance. In early summer the fields are gray with the yellow daisy-like flowers of the calliopsis.

The sensitive plant, grown as a curiosity at the north, grows here in the fields and by the roadside, and is very interesting with its odd, little, pink balls tipped with gold.

The pink family is represented here and the flowers are very bright and pretty but are without fragrance. Sweet Williams and phlox are among the prettiest of our midsummer flowers, and in the fall, mingling with the golden rod are the purple asters, their rich colors making a brilliant display.

Two varieties of lobelia are found here, Lobelia cardinalis and L. syphilitica, the latter having lovely deep blue flowers.

MRS. ELLA L. LAYSON.

Cascade. Ga.

#### A WELLESLEY ROCK-GARDEN.

HILE wandering over the extensive grounds of Mr. Walter Hunnewell's estate, one comes upon the loveliest piece of nature and art that is to be found anywhere in Massachusetts. Not a trace of artificiality can be seen about it, so skillfully has nature been copied, and yet it is the painstaking care of years that has brought it to perfection.

The floral kingdom has been searched from Siberia to the Mediterranean on one

inverted pea blossom in shape. In July side, and from Canada to California on the other, to procure the varied treasures, which here grow in loving proximity.

Alpine and Iceland poppies are everywhere self-sown, and the rich lemon-yellow of their satin-smooth flowers, is

relieved here and there by other and deeper shades. Oriental poppies, newer dwarfs, in salmon, red, and white tinged with pink, lift their clear-cut blossoms daintly

Violets are every where; white and blue, larger and sweeter they seem than ordinarily. They peep out from the side of a rock, or thrust their lovely heads out from the rocky steps leading down to other floral beauties, equally at home in their surroundings.

Aster alpinus, var. speciosus from Asia, (seeds of which were

collected by a Russian, while surveying for a continental railroad) flower abundantly; blossoms large lavender pink; plants ten or twelve inches in height. Wild columbine,

self-sown, springs up in every available spot; the blue variety forming a charming contrast to the patches of metallic-blue blossoms of the Mertensia Virginica, Virginia cowslips, of which many fine plants are seens.

Ajuga alpina, Alpine bugle, of intense blue, also A. reptans, a dwarf variety, and A. reptans alba, very small white flowers, raise their beautiful blossoms for notice. modest Uvularia grandiflora or navelwort, just in bloom, nods its pretty flowers in many charming spots. Campanula grandiflora Maresii, Japanese bell-flower, self-sown and very prolific, will soon put forth its rich deep blue blossoms to delight the eye. The flowers of the American wood lily, white on opening, soon changing to pink, are seen in different shades, while Iris verna, a lowly, but beautiful blue blossom, carpets a lovely spot near by. Phlox subulata, ground, or moss pink, forms a mat, as it were, in many place. P. divaricata, porcelain sky-blue, and P. reptans, deep-rose color, are seen in abundance. Silene Virginica, or fire-pink, gives a touch of bright coloring with its crimson-red blossoms just coming into flower; it is self-sown but ordinarily hard to establish.

Salvia argentea, from the Mediterranean, large silver leaves, which lie on the ground in patches, attracts attention. It has not been considered hardy generally, but has proved to be so, and is also a true

perennial as well, (though classed as a biennial) the plants here having already attained the age of three years. S. pratensis with its showy spikes of violet purple, is very much at home here.

Arabis alpina, a rock cress, white and very showy, also A. bellidifolia, likewise white, but more unassuming in habit. Saxifraga Wallacei, forms a mossy carpet of white flowers, and Trollius Europeus blooms lovingly near it, the bright yellow of the latter seeming intensified by its surroundings.

Alyssum Wiersbeckii, of the saxatile type, best variety from Europe, like a yellow mat, so close are its blossoms, attracts the eye often by its charming color, which contrasts well with the old forms. A. sempervirum (?) fills in some otherwise unoccupied places, looking like cobwebs finely matted.

These are but a small portion of the many of Flora's kingdom to be seen in this charming garden, where a whole day might be profitably spent. A reserve fund has to be kept for a place like this, that nothing may be wanting at its proper

The first and last thing that attracts the visitor's eye is a magnificent wistaria which nearly covers one side of Mr. Hunnewell's mansion. The plant is about fifteen years old, and is a mass of bluish purple blossoms, barely enough foliage being visible as a contrasting color.

To Mr. T. D. Hatfield, the skilful gar-



IRIS VERSICOLOR OF NORTH GEORGIA.

dener, as well as designer of this charming place, much credit is due, he having made a bower of beauty out of what was formerly a wilderness.

Cambridge, Mass. A. M. S. Rossiter.

#### SOME VALUABLE JAPANESE PLANTS.

**G**VER since the Japanese plums were imported to this country and proved so valuable to our list of fruits, the attention of horticulturists has been turned more or less to other fruits, flowers, and

plants produced by the enterprising Japs. The chrysanthemum has shown the success that the Japanese gardeners have attained in floriculture, and the plum represents the highest type of their fruits. But there are many other fruits, flowers and economic plants raised in Japan that might be introduced in this country with considerable success. The Japs are passionately fond of their flowers, and one sees larger displays of them in that country than anywhere else on the globe. Next to the chrysanthemums the blossoms of the plum trees are considered the most valuable. The fruit of these shrubs and trees are of only secondary importance, the flowers being considered more choice than the plums. Consequently in the blossoming season it is not strange to see owners of plum trees break large branches off,

loaded down with blossoms, and carry them to market. These flowers bring more when offered for sale than a similar branch loaded with the ripe fruit.

There are also many species of irises indigenous to Japan; and throughout the country, especially near Tokio, large plantations of these flowers will be seen. The chief variety is known as Kæmpferi, and from this a hundred different varieties have sprung. They run through all the innumerable shades from pure white to the darkest purple. In the flower season a Japanese iris-pond is a beautiful sight, and very few scenes in this or any



OXALIS STRICTA OF NORTH GEORGIA.

other country could surpass it. Many of the different sorts of irises are raised both for the flowers and for economic purposes. The fleshy root stalks furnish starch of considerable local value. In fact, the Japanese have displayed a great talent for converting their plants into valuable eco-

nous lily bulbs are used for food. They June. The flavor of the roots is not at are gathered in large quantities from the all disagreeable, and they might be introplains and mountains for this purpose, duced in this country with fair success. and many make a business of cultivating They are extremely nutritious. them for food. When properly cooked they are not disagreeable dishes. They grandest plants of Japan, and no water



CORNUS FLORIDUS .- DOGWOOD OF NORTH GEORGIA.

are usually boiled in sugar, and served somewhat the same as we serve artichokes.

Lilium tigrinum is the lily planted chiefly for the roots. They are planted in rows two feet apart, and five inches apart in the row. The flower stalks are pinched back and the second year the roots are dug for market.

The Japanese gardeners not only utilize the lily bulbs, but they frequently take our common weeds and turn them into valuable plants through careful cultivation and selection. Our common burdock has reached the dignity of a garden plant in Japan, and as it is raised and cooked it makes a delicious and nutritious vegetable. The long slender tap-root has been enlarged by careful selection, and made tender by close cultivation, so that it is very different from the root of the wild burdock. It resembles the parsnip in appearance, and it is used more generally by the Japs than this vegetable is

in this country. Every grocery store keeps this root, and it is a standard vegetable. While the plant is naturally a perennial, the Japanese sow the seed as an annual and get better results. The seed is sown in rows two feet apart, and thinned out to about six inches in the row. The seeds are planted in rich, sandy loam and the young plants are fertilized with decayed pine leaves. These give a rich flavor to the roots. The roots when ready for market are about two feet long and an inch or two thick at the top. They

sow two crops a year, one crop being dug

omic products. Nearly all of the indige- in the fall, and the other the following

The Nelumbium speciosum is one of the

plant can exceed its beauty for ornamenting a small lake, garden or river. The Japanese are very fond of the large, double, sweetscented flowers that tower above the water's surface, and grow abundantly in every swamp or forest. This plant is also considered valuable for its seeds and roots. The latter form a staple article of diet, and the former are much prized. The root-stalks sold in the market are two or three feet long, and they are cut in slices and boiled until very tender and palatable. They are served in various ways. The Japanese raise these lotus-plants wherever the watery conditions are favorable, and they consider a piece of marshy ground put to better account when planted with these roots than when turned over to rice. The plants are propagated both from seeds and from

the root-stalks. When a field once gets established, many of the roots can be dug every year without injuring the others, and the field becomes a constant source

The Nerine Japonica, or Amaryllis radiata is also found wild in many places, and is given cultivation along the edges of rice fields both for the exquisite flowers it yields and the food value of the roots. The roots are eaten by a few of the poorest classes, but they are used more generally for manufacturing starch. The roots grow in clusters, resembling the



VIOLA PEDATA OF NORTH GEORGIA.

bulbs of the dahlia. In the fall of the year the Nerine Japonica is a showy plant, and the bright red flowers dot the landscape on every side.

There are many other bulbs, roots, and flags that are cultivated in Japan, both for the flowers and for the economic uses to

Many bulb-plants that are not considered fit to eat are used for making starch. Besides those mentioned for this purpose the following are conspicuous starch producing bulb-plants: Helianthus tuberosus, or Kiku-imo; Iris lævigata; Acorus spurius, or Thobu; Apios Fortunii, or Hodoimo; Colocasia antiquorum; Canna Indica, or Dandoku; and Conophallus Konjak. This starch is not as good as that made in America, but it answers all purposes. The roots are first cleaned, and then crushed in a large stone mortar. The pulpy mass is then strained through bamboo baskets. All that passes through the meshes is then mixed in water and allowed to settle, and the fibrous stuff skimmed off. This operation is repeated a number of times until the mixture is pure. Next the pulp is spread on trays in the sun to dry, and after that packed away in boxes until needed. Nearly every family makes its own starch. G. E. WALSH.

#### PLANTS AS FOSTER MOTHERS.

According to Garden and Forest, Prof. Kerner notes that certain wild vetches and umbelliferous plants, which would furnish good fodder for grazing animals. are regularly found in the prickly hedges along the roads and under spiny bushes, which form a belt around forests. These bushes not only defend their own foliage, but also the delicate plants which have been established under their protection. This is no partnership or symbiosis, however, for the advantage is all on the side of the plants protected. The armed bushes receive no profit or return from the plants they defend, and they do not protect them intentionally.

#### NOTES ON BEETS.

HE beet is considered to be one of the most desirable of garden vegetables, but is generally grown for use during the early summer months only. Yet at all times it forms a very desirable addition to the kitchen vegetables, and should be given more attention by our amateur cultivators. Like all other vegetables grown for their roots, the sweetness and tenderness depends entirely on the rapidity of their growth; so, to effect this desirable object, they should be given may be ina deep, well enriched soil.



EARLY BLOOD TURNIP BEET. sowings should

To obtain an early supply the seed can be sown early in the spring, or just as soon as the ground can be properly prepared, and in orsupply wanted for winter use should be terior. made the last week in June.

The seed should be sown in drills, a standard early from 15 to 18 inches apart and an covering with and if possible select a dry day when the soil is in order good ing the for plant. seed. If the ground is very dry, soaking the seed in tepid water for about twentyfour hours will cause it to germinate very much sooner; but if this is done, great care must be taken

feet in length. After the plants are large dle, they should be enough to hanthinned out to about six inches apart; the thinnings can be used like spinach and to many persons there ECLIPSE BEET. is nothing so good in the way of greens. The thinnings can be used, as needed, from the time the young plants are two or three inches in height until the roots are large enough for ordinary use. While the plants are growing they should be freely cultivated at all times.

to firm the soil

in the drills.

will sow a drill

well around the seed

One ounce of seed

of about one hundred

To preserve the roots for winter, they gathered should be about the first of November or before they are liable to frost, and the be injured by tops cut off about a quarter of an inch from crown. Place in barrels and store in a dry, cool cellar. It is ant that the also importroots be dug on a dry, sunthat no decayny day and placed in ing roots be the barrels, whereothers fected. Of varieties in the many the followcultivation most desiring are the teurs: able for ama-

Roots turnip-BASSANO .shaped; flesh white, veined with pink. The roots grow to a good size on light soil and by some persons this is considered to be the best variety for amateurs and der to maintain home use. Others consider its flesh a succession of to be too light in  $\frac{\Pi}{\text{LONG}}$  color and also young, tender rather coarse. BLOOD. When sown late roots, additional it will keep well in winter. Sown at the same time it is a week or ten days earlier be made every two weeks thereafter until than the Blood Turnip. It is somewhat

which the stalks and roots can be put. the middle of July. The sowing of the objectionable on account of a rough ex-

EARLY BLOOD TURNIP.—This has been

variety, although I inch in depth, have found it to be friable soil, a week or ten days later than the Bassano. The roots are turnip-shaped and of a deep blood-red color. The quality is very good. A good variety for winter



EGYPTIAN BLOOD TURNIP.

EGYPTIAN TURNIP.—The earliest variety, with large sized turnip-shaped roots of a deep crimson color. The tops are very small in proportion to size of root.

ECLIPSE.—This is perhaps the most desirable of all the turnip-rooted varieties. It is nearly as early as the Egyptian, of better quality, sweet and tender, in fact its quality is the best, and it is round and smooth and of a dark red color. Its quick growth, excellent quality and handsome appearance make it a very favorite kind either for the private garden or for market.

LONG SMOOTH BLOOD.—This is the best of the long-rooted varieties on account of its being free from rootlets. It is by far the best for winter use, and the roots are always smooth and handsome. Their rich dark red flesh is sweet, crisp and tender-never becoming woody even in the most exposed positions.

CHAS. E. PARNELL. Floral Park, N. Y.

#### AN EARLY FORCING RADISH.

An interview with a New Jersey grower is given in American Gardening. The party is a flower-grower, raising chrysanthemums, carnations and other flowers in a large way, but has also been experimenting with radishes, and lately given a large amount of glass to forcing them for early markets. Commenced shipping them December 24th and continues through January and into February. In answer to the question, "What varieties do you like best, you have several on trial," this reply is made:

"Oh, give us Early Scarlet Globe, every time. That was the first by ten days. It is a pretty radish and bunches nicely, not very large but very choice in quality, small topped and light-rooted. White-tipped makes so much more top and there is a larger percentage of waste-so many that never form up-and with its larger top there is more danger of fungus, and besides there is at least ten days difference in time, and that is an item, for we are needing room now for other crops. We have also tried Red Rose and Rapid Forcing, but Early Scarlet Globe beats them all."

FLOWERS and fruits are always acceptable in an invalid's room. brighten some shut-in last year? If not, do so this year.



#### CHRYSANTHEMUMS FOR AMA-TEUR CULTURE.

THERE are few flowers that do not possess some peculiar charm through the medium of either form, fragrance or coloring. Others revei in such a combination of attractions, that they are exalted to a place of honor, high above less fortunate companions, to enjoy the homage of a flower-loving world. Often their reign is limited to a season or two, when they are dethroned for some more brilliant claimant. Not so, however, the chrysanthemum. The beginning of its cultivation dates backward several hundred years. A nurseryman of Tokio states six hundred varieties. Now the different that chrysanthemum shows in Japan, date from A. D. 900; having been organized by the emperor Oudo. The chrysanthemum is the national badge of Japan, and is regarded with extreme adoration. Nowhere else has it attained such perfection, and nowhere else are its finest var- to the place it occupies than does the

ities under scientific and skillful cultivation. The advent of the oriental chrysanthemum into Europeans gardens is not certainly known, but Jakob Breyne, a botanist of Dantzic, tells us, in one of his works published in 1689, that the Chinese chrysanthemum was then under cultivation in some of the celebrated gardens of Holland. In 1790 they found their way into England. The first real chrysanthemum show held in England, was at Norwich in the autumn of 1829, and about the same varieties were shown at the horticultural exhibition in Boston in 1830, when sixteen varieties comprised the exhibit. In 1865 over 600 varieties were cultivated in Europe, and in 1862 a Dr. Walcott of Boston, himself possessed a collection of sorts are numbered by thousands with hundreds of additions every year. A class of flowers with such a history can never lose its hold upon public favor, and no plant, aside from the distinction which historic favor lends, possesses more claims ieties more jealously guarded. Small, im- chrysanthemum; the principal ones are

The beginner in this fascinating branch of floriculture, is often at a loss to make selections, especially when confronted with the almost endless lists which some dealers send out. A list reduced to about fifty, more or less in number, when well chosen, furnishes a variety sufficient to gratify the most ardent of average amateur growers.

For decorative purposes there is no more beautiful flower. Whether for church, or home, or table, it lends itself with equal facility and grace. For corsage wear, the fluffy, loosely-formed varieties are most lovely, and we find them in colors to heighten the charms of all types of wearers. Among the creams and ivory whites Philadelphia heads the list as the sensation of the day, and of all that I have grown, none have given me greater pleasure than Ivory and Snowball.

Frank Thompson is a giant as to plant and flowers; stout and erect, bravely carrying its load of lovely, cream flowers. L. Canning vies with it for honors, and Beacon with broad streaming petals is a beauty. Anna Manda, the lovely white ostrich beauty with fragrance added to her many charming qualities, completes an array that will furnish snowy, creamy flowers sufficient to light up a choice collection.

Louis Boehmer, the Pink Ostrich Plume, rightly named, heads the lists for a rich decided pink. Ada Spaulding, wholly different, suggests pink-tinted sea-shells. three or four laterals to each stem, and Mermaid possesses good qualities, but differs in being lighter in shade, creamier, more delicate in appearance, but a full lovely flower, and a grand keeper. Roslyn is the softest, mermet-rose pink, entirely distinct in this respect. Lilian B. Bird is a beautifully quilled flower of soft shrimp pink; one of the most beautiful among pinks.

Gloriosum is reliable, early, and profuse in blooming and of a delicate lemon yellow, a favorite of mine, with its round fluffy flowers. Rohallion, graceful in form, and rich in coloring. Harry Widener and Major Bonafon, grand size but of different forms and clear lemon yellow, have given me gratifying results.

Our collection will not be complete without some bold, dashing shades, and so for sweet friendship's sake we will write Cullingfordii, tried and true, low, broad and branching, and loaded with richest, velvety flowers, and no trace of bronze to mar their striking beauty. Gettysburg or George W. Childs, either one for rich, reliable crimsons. Add Elmer D. Smith or Prince Kamoutska with their gold-lined petals for rich and striking effect. They will shine in your collection like a beacon light.

For charming individuality, add Source d'Or, Vivian Morel, Rose Queen, Edna Fras, and Golden Wedding, and we have a collection that cannot disappoint, with good treatment. The treatment is very simple indeed; make it systematic, and never allow the plants to suffer for water, and the harvest will prove both plenteous and beautiful.

I have excellent success in a locality subject to high winds, and also to inroads from grubs and other pests, by keeping the plants in pots, and repotting twice during the season. When the plants arrive from the florists, pot carefully inlight rich soil, water thoroughly, shade for a few days, with a light, daily showering of the foliage with tepid water, then give sunshine, and on warm, sunny days keep out of doors during the warmest part of the day to gradually harden them, keeping them indoors at night until after the middle of May; then keep out altogether. An eastern exposure, that is one which is sheltered from high winds and the hot afternoon's sun, is best either for plants in pots or in the open ground. Keep the soil well stirred and never allow the plants to suffer for water, or the dwarfed blossoms will bear evidence of the neglect. I aim for an abundance of blossoms, rather than overgrown specimens, which may be secured by pruning to a single stem, with but a single terminal bud, and feeding highly. When the single shoot which I first permit to grow, reaches a height of six inches, I pinch it back to four, and allow three or four lat- eties and is an established favorite, both erals to grow; when these are four inches in this country and in Europe. I will give

when these are five or six inches long, pinch again for the last time, and never later than August 1st. When frost threatens remove to a sunny, fireless room, give rich food with plenty of air and water, and there will be a chrysanthemum show to delight your eyes until long after Christmas. If the black aphis attacks my plants, or green aphis either for that matter. I load a heavy wooden rack, provided with strong castors, with as many as it will hold, and trundle them into a small back entry, tightly closed, fumigate them thoroughly for an hour, by throwing coarse tobacco at intervals upon a bed of live coals in an iron vessel. One treatment almost invariably suffices, and the blossoms emerge from their smoky bath, flufflier, and more beautiful than before.

MRS. A. H. HAZLETT.



THE PEARL TUBEROSE

HOW I RAISE THE TUBEROSE. PURE, sweet, white and daintily beautiful, what can be more lovely than the tuberose?

And unlike many beauties it is remarkably cheap. Another thing in its favor is the fact that it revels in the over-heated rooms of most American homes, doing its best in a temperature of from 75° to 85°.

The plant is of tropical origin, and was introduced into Europe more than two hundred years ago. Until within the past twenty years Europe and America procured their tuberoses from Italy. 1865 the Pearl Tuberose originated in the garden of John Henderson, in Flushing, L. I. It is far superior to the older varilong, I pinch them back again, allowing my way of treating the tuberose:

I usually send for my bulbs in season to receive them as soon as it is safe to ship them. I divide the bulbs into three lots usually, for different plantings. From those I wish to start at once I remove every little offset or tiny bulb and with a sharp knife or thumb-nail scrape off every eye or place that looks as if a little bulb were forming. Then in a shallow box or pan I put a layer of moss, about two inches deep, place my bulbs in it, make it moist with warm water, then keep them out of the sun, but where the temperature will average about 80°.

In about four weeks they will be rooted. then transplant to four or five inch pots. in a rich, light or slightly sandy soil; keep them warm and growing and after they begin to spindle, water occasionally with weak liquid manure, or apply a little plant fertilizer. If any side shoots appear remove them at once or you will get no bloom, for they rob the bulb of its vitality and it needs it all to perfect its lovely blossoms. When one lot of bulbs is removed from the moss another lot can be put to root, and so on until all your bulbs are potted. Of course one can start all their bulbs at once, but it is better to do it at different times as it gives a succession of bloom. D. L.

#### COLLECTING ORCHIDS.

The general reader probably has no conception of the fatiguing travels and labors which an orchid collector experiences in procuring a stock of plants from their native regions. The finest species of orchids grow in tropical countries, usually in dense forests, and often high up on the loftiest trees. These localities are hot, humid and often malarious, and the collector from this country or Europe is obliged to expose himself to the most unsanitary conditions while he travels afoot for weary days and weeks in search of his prized plants. Many noted orchid collectors have gone out and submitted to the dangers of disease, wild animals and wild men actuated mainly by their love of botanical research. Some have experienced the sufferings of tropical fevers and some have given up their lives in this pursuit. In certain regions of South America, where orchid gathering has been prosecuted for a considerable time, some of the natives have become valuable assistants and are engaged by the white travellers on their expeditions. They are able skillfully and quickly to rear huts for temporary occupation, from the reeds, palms and other vegetation at hand in the forests, and usually occupy a spot near the edge of a stream. Mexico, Central America, Brazil, Peru and other portions of South America afford large quantities of orchid plants, and Japan, China, India, Borneo, Java, Sumatra and Madagascar and many other regions contribute their share.



In this department we shall be pleased to answer any questions relating to Flowers, Vegetables and Plants, or to publish the experiences of our readers. JAMES VICK.

#### Cutting Young Asparagus.

Will you please advise me if the shoots of asparagus can be cut the first year, providing two-year roots are set.

G. S. B.

Asparagus shoots should not be cut the first year, and but very little the second year, even if two year plants are set. The plants must have time to become strong before much cutting can be done.

#### Chinese Primrose in Oregon.

A correspondent asks whether the Chinese primrose will stand the winter in the open, in Oregon. If any readers of this journal in any part of Oregon, can give this information it will be considered a favor if supplied for publication. The English Primrose it is understood, does much better in some portions both of Oregon and Washington than elsewhere in this country.

#### Chinese Lily or Narcissus.

I should like to tell S. D., who wrote in the December number, how I grow Chinese lilies. Put bulbs in shallow bowls, brace them with pebbles and then fill bowls with quite warm water. Then put them on the shelf of some dark closet and keep them there antil the buds are well developed. I added fresh water nearly every day and once or twice turned off the water and put in fresh. When the buds were well formed I put them out in a shady place and when the leaves had become green, into direct sunlight. I had beautiful blossoms and it was very little work. I have grown with success all the bulbs mentioned in S. D.'s article. Have always started lilies of the valley and kept them dark at first. Hyacinths and lily of the valley have short stems unless kept in the dark when first started. E. M. R.

#### Wallflowers.

I would like a little information about Wallflowers. I purchased a packet of seed in June, 1895, and planted them. They came up all right and I had fine plants in the fall. After being in the cellar all winter I planted them in the spring out doors and they began to grow very nicely and kept on growing all summer, but not a flower appeared on them. I would like to learn how to treat Wallflowers.

Springfield, Mass. C. B.

If the plants had been taken up last fall and potted and brought into the greenhouse, or kept in a window in a cool room, they would probably have bloomed this winter. If they pass through the winter all right in the open ground they will no doubt, bloom the coming spring.

#### Geraniums Not Blooming.

I keep flowers, such as geraniums, but they will not bloom for me. Will you tell me what I can do to make them bloom.

MRS. M. W.

Franklin, Pa.

That geraniums do not bloom in early winter is a common complaint, especially with inexperienced plant raisers. They should not be expected to give much bloom at that season. By the latter part of February they will commence to bloom more freely and continue thereafter. Plants that are not blooming should be kept in a good, healthy condition. Soon after they have made a vigorous new growth they will begin to bloom.

#### Ipomœa Palmata.

On page 38 of Vicks Magazine there is a communication from S. B. P. regarding the so-called Ipomœa palmata which I am glad to be able to substantiate. I planted two tubers of this vine last spring and was much pleased with the results. The vine begins to grow much earlier in the spring than other species, and continues growth until frost. I have now grown six species of Ipomœa and I like this much better than any of the others save I. pandurata. A tuber of I. Michauxii under similar conditions has grown not nearly so well. The tubers of either species are easily and safely kept over winter in a cool place in dry sand. I would advise planting those of pandurata early in the season, and I suspect that the tuber is hardy. The tubers may be divided, like those of I. batatas, the sweet potato, or I. pandurata.

S. W. W.

Lawrence, Kas.

#### Columbian Raspberry.

Please inform me how to treat the Columbian Raspberry. It don't seem to do right, it does not grow up as it should.

S. F.

There need be no anxiety about the Columbian raspberry. The first year's growth may not be upright as the weight of the long shoots carries them over, but the shoots of the second year's growth will be so strong that the stems will be quite erect. The Columbian makes shoots frequently that are an inch in diameter, and strong enough for a walking stick.

#### Chinese Lilies.

A writer S. D., in your Magazine for December, in an article on Chinese Lilies, states a strange experience. While able to grow and blossom out tulips, easter lilies, etc., cannot succeed with Chinese lilies. I do not know why he should fail, unless the presence of gas, furnace or illuminating, should cause it. But I never have failed, even with gas in the room. My way is thus: I take a glass fruit dish, moderate depth, fill the bottom with coals, add a few bits of charcoal. Arrange firmly on the coals my bulbs, usually three, then turn warm (not hot) water over them till the dish is full, which covers only the lower part of the bulbs. Then place in a dark, cool place in the cellar, and let them stay there not less than three weeks, longer won't harm them if the tops do not grow too far. Change the water once a week, supplying it always tepid. Bring them up to the room they are to bloom in, and occasionally add a little plant food to the water that you give them to replace evaporation from the dish. Keep the dish well filled with water so the roots may not become dry. You ought to have flowers.

Boston, Mass. C. F. G.

#### Gathering Sweet Peas.

I would like to know at about what time it is best to pick sweet peas, for seed. Our frosts come about the first of October, generally, so as to stop the growth of all garden plants. I got some sweet Peas from you last spring and planted the first on March 28th, and on to the 14th of April. The first bloom came July 2nd and so on up to date. The present picking is from vines protected by covering nights with old gunny sacking. I have about 140 feet of wire netting covered and have had the finest display of sweet peas in this neighborhood. I have thousands of pods on the vines that are full of peas just formed, that now (October 18) are killed. I have been picking a great many that were well filled and found the seeds were still soft.

I would like to know if there is any definite condition towards maturing of the seed. At what time would it be best to gather. An answer through the MAGAZINE will oblige A SUBSCRIBER

Buena Vista, Colo.

The pods turning yellow or brown indicates maturity, and we endeavor to take our seed stock in this condition.

#### Aphis.—Kerosene Emulsion.—Rose Site.—Canna.

Will you please inform me through your Magazine what to do for small green lice on rose bushes. Also how to make kerosene emulsion, and whether a sunny situation is best for tea and hybrid tea roses? Which do you consider the best new canna?

Waltham, Mass. J. A. G.

A solution of tobacco soap or whale oil soap will kill the aphis.

Kerosene emulsion on a small scale can be made as follows: Take two ounces hard soap and dissolve in one quart of water; add to it one-half pint kerosene; shake the mixture violently for some time or until there is a thorough blending of the parts; then add three quarts more of water and stir all briskly. This will make a gallon of insecticide. Apply with a syringe.

Roses will do very well in a place shaded a part of the day, especially during the middle, if they can have the sun in the morning and the latter part of the day. But usually they are given a free, sunny spot.

The varieties of cannas are too numerous to decide on any one of them, or even any one of the new ones, as the best. Besides, it is to some extent a matter of taste.

#### Tuberous Begonias.

I want to try some tuberous begonias this year. Will you kindly advise me the best course to take with the bulbs or tubers after receiving them?

Akron, Ohio.

S. W.

Tuberous begonias are very beautiful plants and should be more generally cultivated than they have been. At one time it was thought they would do well when bedded out, but the sun is too hot in this country to allow of their use in that manner, except in some shady and well protected place. But as a summer blooming pot plant there is none more desirable than the tuberous begonia. The tubers can be started any time from February to May, but the earlier the better. A light soil is best, or one consisting of equal parts of leaf mold, loam and well rotted manure with a little sand. Set the tubers about an inch below the surface, water, and then stand in a warm A temperature of 60° to 70° is A single tuber can be placed in a four-inch pot, eventually to be shifted into a five-inch. Or, a very showy pot of plants can be made by using as many as a half a dozen tubers in a ten or twelve inch pot, and this set in a large jardiniere. When the plants begin to push give them good light, and when weather is suitable allow them air, to prevent their be-coming drawn. Attend to the watering carefully, guarding against giving too much while the plants are yet small and weak. In the summer the plants will do well on a shady veranda.

### HALL'S

## Vegetable Sicilian HAIR RENEWER

Will restore gray hair to its youthful color and beauty—will thicken the growth of the hair—will prevent baldness, cure dandruff, and all scalp diseases. A fine dressing. The best hair restorer made.

R. P. Hall & Co., Props., Nashua, N. H. Sold by all Druggists.



ROCHESTER, N. Y., FEBRUARY, 1897.

Entered in the Post Office at Rochester, N. Y., as second class mail matter.

The name and contents are copyrighted. Publishers are invited to use any articles contained in this number-if proper credit is given.

Vicks Illustrated Monthly Magazine is published at the following rates, either for old or new subscribers. These rates include postage: One copy one year, in advance, Fifty Cents.

One copy for twenty-seven months (two and onefourth years), full advance payment, One dollar.

A Club of five or more copies, sent at one time, at Forty Cents each, without premiums. Neighbors can join in this plan.

Free Copies. One free copy additional will be allowed to each club of ten (in addition to all other premiums and offers), if spoken of at the time the club is sent.

All contributions and subscriptions should be sent to VICK PUBLISHING Co., ROCHESTER, N. Y

#### ADVERTISING RATES.

\$1.00 per agate line each month. Preferred position 25 per cent. extra. Reading notices \$1.50 per

Length of column to inches. Width of column

The last forms close promptly on the 10th of month preceding date of issue, i. e. January issue closes December 10th. Get orders in early.

Address all orders for advertising

VICK PUBLISHING Co., Advertising Dept., 38 Times Building, New York. H. P. HUBBARD, M'g'r.

#### More Fruit Wanted.

Notwithstanding the great amount of fruit now produced in the northern states, and all over the country for that matter, there is apparently a deficient supply of sour cherries and winter pears. It may be said that the market is practically destitute of winter pears, and as the fruit may easily be kept in storage houses without ice, there is undoubtedly a chance for some enterprising fruit growers in this way.

#### \* \* Book Notes.

TURKEYS AND HOW TO GROW THEM. treatise on the natural history of turkeys; the various breeds and the best methods to insure success in raising turkeys; essays from practical turkey growers in different parts of the United States and Canada. Edited by Herbert Myrick. The book is the result of the combined talent of some of the most successful turkey raisers in the country. It contains full instructions from setting the eggs to marketing the dressed fowls. Published by Orange Judd Co., New York City. Price \$1.00.

THE AMERICAN FRUIT CULTURIST. J. Thomas; 20th edition revised and enlarged by William H. S. Wood. Iltustrated with nearly 800 accurate figures. William Wood & Co., New York City. Price \$2.50

The new edition of the American Fruit Culturist comes to hand, revised and greatly enlarged. In the preface of the 19th edition Mr. Thomas noted the first edition "was written more than thirty years ago," and it is, now years that this work has been before the public. That it will continue to be a standard work for years to come no one can doubt after seeing it in its new form. Mr. Thomas who

pomologist of this country, died in 1895. The present editor says: "Mr. Thomas was my lifelong friend, and when the infirmities of his later years prevented him from making the needed revision himself, he requested that I should personally undertake it. \* \* \* \* Unfortunately, almost before it was begun his death deprived me of the support upon which I had so greatly calculated. The work has, therefore, been completed under disadvantages which those who only personally knew its gifted author can appreciate." It is impossible to notice the many changes and additions which have been made, but many new chapters have been added. The chapter on Insects and Diseases has been greatly extended. The descriptions of varieties brings the work up to the present time. New chapters have been added on nuts and wild fruits and subtropical fruits. The number of illustrations is largely increased. The mechanical execution of the work is all that can be desired, and the American Fruit Culturist in this edition becomes the standard pomological authority of this country.

AN ILLUSTRATED FLORA OF THE NORTHERN United States, Canada and the British Possessions. By Nathaniel Lord Britton, and Hou. Addison Brown. In three volumes. Charles Scribner's Sons, New York City.

This work is a most important contribution to botanical literature from several points of view. In the first place it brings together for the first time in a complete series all the known members of the flora of that region of the North American continent north of a parallel of the southern boundary of Virginia and included between the Atlantic coast and the 102 meridian of longitude. All systematic botanists in this country, or those who have occasion to refer to an authority on the flora of the region named, will appreciate the great benefits of so complete a work. In the next place it brings peace out of the turmoil that has existed for several years among scientific botanists in regard to nomenclature, for in this work a consistent system is adhered to which will give a fixity to the names of plants which has never before attained. An account of this system need not be given in a popular notice like the present. Its use produces some changes and introduces some new names of plants. These, however, are not so numerous as to be in themselves of any great objection. The greatest that can be urged is that the changes impair to some extent the value of extant horticultural literature wherever in such writings they are felt, and this promises to remain an objection, since British authorities do not accept the new system, although they may admit its soundness, and probably will not, at least for many years. However, in this matter perhaps time will show that it is best to do right "uncaring consequences."

The generic and specific descriptions and plant notes are full, clear and explicit.

for many years stood as the principal Very complete conspectuses are given of genera and species. The pronunciation of the name is very accurately indicated, and as far as possible appropriate English names are supplied. But the crowning feature of this great work is its illustrations. Very excellent illustrations are given throughout, each species being figured, the illustration and the descriptive matter standing side by side on the same page. The figures, of course, indicate the specific differences. This is something never before attempted, and the manner in which this feature is here executed is worthy of all commendations, and will prove of great assistance to all who consult the pages of the work. As a specimen of book making it is beyond criticism. The work is to be complete in three volumes, the first of which is only now issued, but all are to be completed the present year. The cost is three dollars per volume, nine dollars for the complete set.

ELEVENTH REPORT OF NEW YORK STATE ENTOMOLOGIST. By J. A. Lintner, Ph. D.

The annual reports of the Entomologist of this state are of great value, relating as they do to the injurious insects that are at the time doing mischief. The present volume contains scientific and practical notes on a great variety of insect pests. It is of great interest and value to farmers, fruit-growers, and gardeners, for whom Dr. Lintner is doing a most useful work with persistency and marked ability. Further reference to some of the matter of this report will be made here-

You can help increase the size of the Vick family by getting up a club—you can also increase your in-come by so doing. That's pin money or a Kodak.

## Keep

Easy to say, but how shall I do it? In the only common

sense way - keep your head cool, your feet warm and your blood pure by taking Hood's Sarsaparilla, and only Hood's. Then all your nerves, muscles, tissues and organs will be properly nourished. Hood's Sarsaparilla, by purifying and vitalizing the blood, builds up the system, creates an appetite, tones the stomach and gives strength.

## Hood's

### Sarsaparilla

The best-in fact the One True Blood Purifier.

Hood's Pills are the only pills to take with Hood's Sarsaparilla.

#### THE GROUNDSEL TREE.

THE engraving on this page represents a specimen of a shrub very rare in cultivation. The Groundsel Tree, of which the botanical name is Baccharis halimifolia, is a native of this country, growing mostly along the Atlantic Coast from Connecticut to Florida. The genus Baccharis presents the rare feature of a woody plant-a shrub-in the great order compositæ which almost wholly consists of herbaceous plants. Its name is said to be derived from Bacchus, the god of wine, in allusion to the spicy odor of the roots. One of its English names is Plowman's Spikenard. The specimen from which this engraving has been prepared stands in Highland Park in this city, and was in bloom last September, and a photograph of it was taken late in the month.

Thus, it will be seen that we have in this plant another fall blooming shrub. The staminate and pistillate flowers are borne on separate plants. The staminate flowers are less showy than the pistillate ones, and staminate plants are, therefore, less desir-

able to cultivate, except as rare specimens. The pistillate plant is literally covered with little heads of clear white flowers, growing much the same as those of Eupatorium ageratoides or like ageratum. The specimen is very compact, about five feet in height, and in time,

unless kept down, may grow to twice this height. As a late fall blooming shrub it is desirable, but has never been much cultivated. It would be difficult at the present time to

procure plants of it from nurserymen, though probably more attention will now be given to its culture. It is propagated by cuttings. At the present time the only fall blooming shrub prominent in our garden is the great-panicled hydrangea. The althæas come into bloom in August and pass out early in September, thus leaving the hydrangea named alone in the fields for the later months. The introduction of the Groundsel Tree and the Flowering Pea Bush, especially for extensive grounds, will be a distinct advancement.

### SPRING AND SUMMER IN MY GARDEN.

BOW many of you are familiar with the honey locust, Gleditschia triacanthos? It is a native tree but it is planted much less than it ought to be with us. In Europe it is greatly prized and set by the million, they say. Our seedmen should offer its seed in five-cent

packets and encourage the people to grow it. If there is any foliage more delicate, graceful and beautiful than that of a honey locust from one to four years old from the seed I do not know what it is; it is simply perfect. It is one of the finest trees at any age, its fern-like leaves are dark and shining; it has no insect enemies that I ever saw. The frozen rain of winter will tear the yellow locust, Robinia psuedacacia, all to pieces, or the wind will wrench off its boughs, but neither storm nor burden of ice ever breaks the honey locust, with me at least. The flowers are crowded on straight stems three or four inches long; their number is vast but their small size and dull green tint make them inconspicuous; you would not be aware from a little distance that the tree was in bloom, but there is a roar of bees as long as they last. This tree is

are nate

BACCHARIS HALIMIFOLIA.

polygamous, one of them may load itself of flat stones and put them over the with pods every year, another will have a plants like a roof, leaning one against the other, to keep off the sun. When bear any. The dark brown pods a foot to two feet long hanging down from the branches attract great attention, people keep on asking what tree it is.

The pods hang on most of the winter and the wind rattles the beans in the pods. Pour boiling water on the beans and let them soak till they swell, planted then they will soon be up. Great difference is seen in the seedlings in the matter of thorns, one may cover its large branches with bunches of terrible branching spines, another will have few or none. The wood is hard and strong and heavy, making excellent axe-helves, pins, handles or anything requiring hardness and strength. The tree is very distinct at any distance in tint and form; it seldom suckers, and

should be grown everywhere. To-day, July 4,) the pods are six to eight inches long.

JULY 4. Here is a clump or rather a patch of spirea\* whose specific name 1 never knew. Last spring seeing the old wood was partly dead and somewhat scragly, I cut it clean to the ground, thinking it wouldn't flower again till next year, but here it is five feet high and in full bloom. Its only fault is the rather short duration of its flowers, the great white plumes a foot long and six inches wide, tapering up to a point and mostly erect. are very showy and the pure white spherical buds are pretty too. The pinnate leaves six or eight inches long are very like those of the stag's-horn, sumac in form, they are more deeply ribbed and are smaller, very handsome from earliest spring to autumn. It opens its buds by the almanac whether there is any warm

> weather or not; its young leaves are often covered with snow. The plant suckers awfully and will have to be dug back now and then.

Last spring the self-sown catchfly, Silene Armeria, came up thickly and I dug up some chunks of the hard dirt, breaking them into bits, each bearing one or more of the seedlings. I set them into a freshly dug bed and today there is a mass of red, wide as the planting. The catclifly is a pleasant little annual, a foot high, with neat and pretty foliage and bright, pink-like flow-

ers lasting a long time, seeding heavily and coming up the next spring without fail. In setting out small plants I find it good to collect pieces

the other, to keep off the sun. When the need for this shelter is over the stones may be laid close up to the plant flat on the ground, thus protecting it from many dangers, hens, etc., besides you can see the stones and can find the plant more easily when small. The stones keep the soil moist under them in a dry time, and so are a benefit to the plants. Take them up when you wish to hoe, then put them back. Hens can be discouraged nicely in this way. Sink the stones out of sight in the earth if you are particular about the looks of your bed. Clam shells, slates, bricks or anything else can be used if you lack good stones.

Some time ago I read of a hybrid between the pansy and sweet violet more \*\* Probably S. sorbifolia.—ED.

hardy than the pansy and sweet like the violet "destined to unbounded popularity, etc." So I got the seed last spring and have some plants now in bloom. One is so light a yellow that it is almost white, has fine pencilings in its center like the wild canadensis violets; others are brightblue or dark violet and would pass for small pansies. Some have no scent at all, others are very sweet. This with their more perennial habit, if this latter character proves real, will give them a place, but a good bed of pansies is far ahead of them as a display of flowers. I read that the flower stems came from the ground like the wild blue violets, but mine are just like pansies in their way of growth, their habit in this respect not being fixed as yet, probably.

Now the perennial phlox begins to bloom. A rosy red seedling of my own and a pure white one are the earliest this year. No hardy perennials, or at least not many perennials, are better than the phlox. It is ironclad, increases fast and produces limitless quantities of beautiful, sweetscented flowers for months. The mice ate up some of my roots last winter, the first time I ever knew this to be done. Every catalogue has a different list, but all are good no doubt. Get a dozen kinds and let them mix and self-sow; you will soon have new seedlings of your own. No plant is more sure to live when ordered from the seedsman and divided and transplanted. An old dull purple kind is an ancestral plant all over this region, but the new and better kinds—just as easy to grow, are not so common; tens of thousands of these should be set out. The air all about my place is steeped in the fragrance of phlox every summer. The old corn lily, Hemerocallis fulva, is not just now in fashion, but here is a clump planted in a damp place in stiff sod four or five years ago. A great mass of foliage rises some three feet from the green turf, the strong erect flower stems are two feet higher than the leaves and bear 130 buds and flowers. It is bold and picturesque if only a corn lily. I do not commend it for all places, but where it can have room it is a pleasant plant which I do not care to be without. It has made itself cheap and common by its utter indifference to hard conditions, its eternal duration and its never failing power of increase, but its foliage is as good as the Yucca's, except that it is not evergreen, and its flowers are large and of good form. If only its tint were pure white or bright red! E. S. GILBERT.

Canaseraga, N. Y.

\* \*

KEEPING CUT FLOWERS. — A correspondent says that he drops a few grains of permanganate of potash in the water in which cut flowers are placed, with the result that the flowers keep fresh a much longer time.

### PEDIGREE STRAWBERRY PLANTS.

PEDIGREE plants or animals are those having a known line of ancestry-presumably good ancestry. New varieties of strawberries originate from seed sown by man or nature. A variety thus originated propagates itself by means of runners which grow out from an old plant, take root and form young plants. A pedigree strawberry plant, as I use the term, means usually, but not always, one of the above kinds (for the ancestry of some of the best varieties is not known), which has been still further improved by repeatedly selecting plants noted for general excellence as fruit bearers, from whose runners young plants are obtained to set all new fields.

From these young plants, the most excellent ones, are again, in fruiting time, selected the most excellent ones, and so on indefinitely. But the berries should not be allowed to remain on these plants an hour longer than is necessary to prove the fruitfulness and general excellence of the plant. The berries should always be pulled off before they ripen or the seed mature, which is the process so exhausting to the plant.

It is denied that this selection does any good at all, and asserted that one plant of any given variety is just as good as any other plant of that variety. That the assertion is erroneous I know from actual and repeated tests. I have long followed this plan of selection and proven that it does tell strongly in the improvement of a variety, provided, of course, that it is intelligently and persistently carried out. In fact improvement in plant or animal can come in no other way. To assert that strawberry plants of any given variety are equally good, no matter how some may have been allowed to run down by neglect or the others bred up by careful selection and high culture, is an error, and an error of a very harmful kind. It is as erroneous as to hold that one herd or strain of Jersey cows is as good as any other herd or strain, although one might have been highly and judiciously fed and bred from only the best cows, and the other herd or strain had been starved and bred from scrubs for twenty generations.

The fact is that all varieties of strawberry plants as soon as originated begin a gradual process of change. It may be slow but it is sure and almost inevitably tends to deterioration.

My plan is to arrest and even to some extent reverse this process of deterioration, by raising young plants from old plants of conspicuous merit, and from no others.

O. W. BLACKNALL.

Kittrell. N. C.

\* \*

Good books on gardening should be in every home.

#### AN AMATEUR'S NOTES.

WHATAILS THE ÅGAVE?—My agave has what looks like small blisters of a paler color than the rest of the leaf. These gradually spread a little, turn brown and dry up, leaving unsightly scars that destroy the beauty of the plant. Who can tell the cause and cure?

GRAFTING THE CACTUS.—This is another interesting part of floriculture. Experimenting in this line I have now a Cereus flageliformis grafted on a Colubrinus. The graft now measures nearly three feet in length and the tiny red flower buds are showing to-day. It was set last spring, now January 26th. I read the promise of a fair showing of magenta flowers in the near future.

Rubber Tree (ficus)—This is a most beautiful window plant for one who wishes something stately in green, with but little work. The great waxen leaves can be readily cleaned of all dust with a soft feather brush. Mine, obtained last spring has leaves measuring eleven and three-fourths inches in length by four in width. That is more than the florist promised, which both speaks well for his word and flatters my vanity. Frequent sprayings are gratefully acknowledged by it with bright shining leaves and rapid growth.

APHIS ON FARFUGIUM.—Some one says the farfugium, so far as he knows, has no insect enemies. To such let me say when the green aphis gets into your conservatory look out for your farfugium. The young and tender leaves afford them a splendid home, in which they thrive wonderfully. And the roses! Oh how they do love them! Last summer my bushes out in the flower bed were literally covered with them. Spraying did no good, no matter how hard we dashed the water on. Finally I took a pail of hot water and a brush and brushed them into a pail. By the end of the season the pests were about conquered. Tobacco did no good. I found them fairly reveling in a clump of tobacco litter, seeming to enjoy the faded

THE MADEIRA VINE.—One of these planted at the east end of the house was once the admiration of the household, for like Jack's bean, it grew and grew and grew, up to the chamber window, over the top and into the open sash, running on strings provided for it till the room was beautifully draped and sweet with the delicate fragrance of its flowers drooping in a profusion of white sprays. When spoiled with the frost I took up almost a bushel of great tubers, like good sized potatoes, all grown from one small tuber. only an inch in length. I have never since done half as well with this vine. Some tell me that I gave so many away that year that my luck went with them. I know just what is the matter. I threw all my washing suds and house slops around it that year, and since that I have divided them up with other plants.

A BED of Cassia.—The cassia with its delicate pinnate leave and golden flowers, is really a pretty plant, and when seen in a large bed by itself, there is a richness in the coloring, a peculiar harmony in foliage and flower that makes the bed charming. Then the golden-brown bees, flying in and out among the flowers in their foraging expeditions for floral sweets, are no small addition to the beauty. A bed of cassia in the busy days of summer is musical with the hum of these insects, and if you thoughtlessly grasp a branch you may find to your grief, that some industrious little body has pre-emptied nearly every flower upon the stalk and is not willing that his claim shall be "jumped." If you are a bee-keeper do not fail to have a good bed of Cassia Chamæcrista. Sweet clover too, is always a resort for the tenants of the hive as well as a grateful addition to the floral decorations of the house.

WHAT WAS IT?-Last summer I found on the grass near my flower bed, myriads of small insects, closely resembling, if not identical with the very minute insect known in Missouri as jigger. The grass for some distance around was fairly alive with them. Not knowing what else to do, and wishing to destroy them at once, lest the whole farm become infested, and from that the neighborhood, I showered the whole plot with boiling suds, then, awaiting results for a week or ten days and finding no more of them, with an iron tooth rake, the sod was thoroughly scratched, then again seeded to grass. Can any one tell me what they were and how to get rid of them?

Another pest is frequently found in great handfuls, clustered together in the soil. I suppose they are the larvæ of something, but I do not know what. They are a sort of grub about three-fourths of an inch long, of a dingy color and hairy. I do not think I ever saw them until within the last ten years.

E. WHITNEY PUTNAM.

#### SOWING SOME KINDS OF SEEDS.

ROM this time and for the next few weeks is the most desirable season to sow some kinds of seeds which would be worthless to sow late in the spring for the reason that plants from them could not be brought into bloom at the time when they would be wanted.

BEGONIA-This seed is very small and requires both skill and care to use it. The soil for it can be leaf-mold and sandy loam in equal parts and sifted fine. Place some broken crocks for drainage material about an inch in depth at the bottom of a pot, pan or shallow box. fill the box quite or nearly full of the soil, and with some flat surfaced object, such as a piece of smooth brick, press it down firmly and smooth. On the surface sow the seeds thin and as even as possible. Do not attempt to cover in the slightest

with any soil or sand. Set the pot or pan that of a banana, apple and pineapple in a dish of wnter to nearly the depth of the soil, so that it can soak up into it, but not come to the surface. Now cover with a pane of glass and set in a warm place, and keep shaded from the sun. No more water may be needed until the plants are up, but if it should be found to be getting dry the pot can again be placed in water. being careful not to have it come quite to the surface. As soon as the plants appear tilt the glass to allow air, and at length remove it altogether, and place in a good light. As soon as the plants have made their first pair of true leaves they can be pricked out into another pot or box, about an inch apart.

CALCEOLARIA.—The directions above will apply equally well to the seed sowing of this plant. Gloxinia seed may be treated the same except that a very light sprinkling of sand may be given over the seeds. Cyclamen seeds the same as gloxinia.

VERBENA, PANSY AND CARNATION.-The seeds of these plants being somewhat coarser can have a covering of sand about an eighth of an inch in thickness, but may be best started undes a pane of glass as above described. Be careful and not keep the soil too moist and be sure to remove the glass when the plants appear, or they will be apt to dwarf off.

Cannas require considerable time from seed to be of a suitable size for planting out, and the seed should be started early. Cut or file a hole through through the shell before planting in order to let the water swell the seed. It takes months to soften the shell of a Canna seed, and if planted without first perforating it in some manner the result will be disappointing. It is the same way with the seed of Ipomœa Bona-nox.

#### THE CASABANANA.

How many of Vick's constituents have tried the new climber, the great climber called Casabanana, and botanically Secana odorifera? If a vine is wanted to hide from view any rough or unsightly object, if there is a dead tree which would appear better if given the appearance of life and verdancy, if there is a rough fence that would appear more pleasing if covered with green and yellow and brown, there is nothing that could be used to better advantage to secure such a result than this new climber.

I know of no annual vine that will cover the same amount of space in a given time as the one now being commended. The matured fruit makes an excellent preserve and it is very delightful in the raw state. A single vine if not infested with the melon worm will bear anywhere from five to twenty melons, which, when matured, are the size of a full grown cucumber, twelve to fifteen inches long and three to four inches in diameter. Color, that of a plantain or red banana; odor,

combined habit, will climb anything, tree, chimney, or houseside. Must have string trellis or arbor. It is fine for a summer house. Here we start it in a cold frame March 1st; set out March 20th to April 10th. Fruit not ripe by October 25th, if gathered and put away in house or cellar, will ripen during the winter. My wife made preserves this week (January 15th) from melons taken from the vine October 29th. A foot or so of the stems should be left on the melon and the fruit should not be bruised.

I have no doubt you can mature them sufficiently in your latitude by starting as early as possible.

Those who raise it once are quite sure to do so it again, that is, if its full value is realized. As with many other things, some few may not like it. It is an annual.

SAMUEL C. COOK.

Milledgeville, Ga.

VICKS MAGAZINE wants bright, snappy articles appropriate to its columns. Send us the cream-keep the skim milk. A story told in a hundred words is usually interesting.



#### PACIFIC STATES FRUIT CULTURE.

California fruit growers want protective duties on raisins, prunes, olives, English walnuts, almonds, citrons, lemons, lime and oranges.

At the annual meeting of the Oregon Horticultural Society in January, 1897, the chairman of the committee on orchard fruit, Mr. D. W. Coolidge, made an interesting report. In regard to the scab of pippin fruits he says:

"The black spot, Fusicladium dendriticum, that affects the apple and pear, I consider the most formidable opponent to apple and pear culture in the Willamette valley. I have demonstrated to my entire satisfaction that the ravages of the Codlin moth can be held in check by timely spraying with arsenical mixtures, but I have never seen an instance yet where spraying with Bordeaux, or any other compound, has successfully prevented the attacks of the black spot. We all know that unless we can keep our apples smooth there is no use raising them."

This statement is not in accordance with with the experience of the best fruit growers of this region who have demonstrated that the apple scab can be prevented by the proper and timely employment of the Bordeaux liquid.

In the same report the writers say:

"In some respects Oregon is the best grape country in America." Here in the Willamette valley, side by side, can be grown the finest of both foreign and American grapes. Of foreign grapes I would plant a few vines each of Chasselas Neufchatel and Violet Rose (both early white); the Red Burgundy (a fine wine grape); Black Hamburg, and Muscat of Alexandria. Of American varieties - Worden, Concord, Herbert and Eaton (black); Moore's Diamond and Niagara (white); Delaware, Agawam, Iona, Brighton and Catawba for red.

#### \* \* PLANTING AND CARE OF ASPARAGUS.

A writer in the Northwestern Agriculturist gives advice in regard to asparagus:

Prepare the ground as you would for any We always advocate deep plowing for everything. If it is a heavy clay subsoil, subsoil plowing would be a great advantage; don't select a low, wet place. You want the bed where it will thaw out quickly in the spring, so as to commence using it early.

Mark out the rows about five feet apart, make a good wide furrow about six inches deep, set the plants about eighteen inches apart in the row, and see that the top of the buds are about four inches below the surface. Keep clean as you ought to keep any other crop. Weeds are robbers; don't let them steal the nourishment that should go to the plants.

Plant as early in the spring as possible. Don't expect to cut any for two years and don't cut too late in the season, especially while the bed is young. Let the tops remain until the frost kills them in the fall, when they can be cut and burned. It is advisable each fall to cover the bed with several inches of well-rotted manure. Asparagus is a great feeder and the plants will respond liberally to generous treatment,

Remember that asparagus has few if any superiors among garden vegetables and is entitled to considerable respect on account of its age. It was a favorite food among the Romans a number of generations before the Christian era. We hope that many of our readers will make arrangements to supply themselves and families with the excellent vegetable.

#### PEAS AS AN ORCHARD CROP.

While it does not generally pay to cultivate and crop orchards after they get into bearing, an exception may well be made says the American Cultivator, for the pea crop, which adds fertility to the soil rather than decreases it. The benefit to the land will be all the greater if the pigs are turned in to harvest the peas. It is also probably as profitable a way as can be found of disposing of orchard-grown peas, which are not generally very well filled with grain. The peas ripen just at the time when the hogs are needed in the orchard to devour fallen fruit. There is no better feed for young growing pigs than peas gathered by themselves. the pigs are left without rings in their noses the surface soil will be mellowed as well as enriched thus preparing it for winter and for another pea crop the following year. With peas to furnish nitrogen, and potash and phosphate to supply universal fertility, orchards may be kept thrifty without using any stable manure. This is the only way in which very large orchards can be cheaply kept in good condition. Almost all orchards are too large for farmers to profitably manage. To enable them to cheaply provide nitrogenous fertility is a difficult task, as clover requires two years to grow, and while growing it unduly checks the growth of trees as the pea crop will not.

Get up a club in your vicinity for Vicks Magazine and then you can have neighborly flower and gardening chats. Thus you will help each other and Vicks will help you all with its hints and helps.

#### ART WORK CALENDARS.

The beautifully lithographed calendars that used to sell for anywhere from twenty-five cents to a dollar and a half, are this year much cheaper than formerly, thanks to the struggle between the dozens of kinds of business firms that are trying to keep their names before the public by issuing advertising calendars that in many instances are genuine works of art.

So many beautiful calendars and entertaining novelties have been issued by the proprietors of Hood's Sarsaparilla, that we are hardly surprised to receive this season not only one of the very prettiest designs in calendars, but with it coupons which entitle the recipient to attractive novelties.

Hood spares no expense in getting up calendars that are perhaps intended to be kept by their recipients for their beauty, if for no other

Every one who gets a Hood's Sarsaparilla calendar for 1897 secures something that will prove interesting and valuable as well as a beautiful specimen of the lithographer's art. The calendar is accompanied this season by an amusing little book on "The Weather." Ask your druggist for Hood's Coupon Calendar, or send six cents in stamps for one, to C. I. Hood & Co., Lowell, Mass.

## FREE

A positive, quick and lasting cure for Constipation, Indigestion, Dyspepsia, Sick Headache, Kidney and Liver Diseases, Poor Blood, Rheumatism, Corpulency, etc. Thousands of testimonials from grateful people who have been cured. We send the Medicine free and post-paid. You run no risk, save Doctors' bills and get well. Good Agentswanted. Write to-day. Address
THE EGYPTIAN DRUG CO., New York City.

#### A SIMPLE CATARRH CURE.

I have spent nearly fifty years in the treatment of Catarrh, and have effected more cures than any specialist in the history of medicine. As I must soon retire from active life, I will, from this time on, send the means of treatment and cure as used in my practice, Free and post-paid, to every reader of this paper who suffers from this loathsome, danger ous and disgusting disease. This is a sincere offer which anyone is free to accept. Address, Prof. J. A. LAWRENCE, SS Warren St., New York.

LOVELY CARDS Les CARDS. We p tiquette, 1 Bo Art of Love Making & 1 Souvenir Album, You can't find these elsewhere for 10 cents, postage 2o. A LOVELY, SOLID, GOLD PLATED ENGRA' RING FREE with 5 orders. JEWEL PRINTING CO., Clintonville, Co.

All old and new varieties. Extra quality. Warranted T. S. HUBBARD CO., FREDONIA, N. Y.



gular Side Splitters and Button Busters, Fun for a year. All fents, postage 4 cents. X. L. BIRD CARD CO., Clintonville, C.

### THERE'S MONEY IN IT rs, giving co somely printed in co and description of th of fowls. Plans for po and description of the leading breeds of fowls. Plans for poultry houses, tested remedies and price of poultry and eggs. Worth many dollars. Sent for No. stamps or silver postpaid. THE J. W. MILLER CO BOX 213, FREEPORT, ILLINOIS





## Blindness & Preven

The Absorption Treatment removes the cause of impaired vision and diseased eyes. It is the most successful and humane treatment ever devised. Hundreds who have been pronounced incurable have been successfully treated at our Sanitarium and at their homes.

No Knife. No Risk. Pamphlet Free. Read it.

Address, BEMIS EYE SANITARIUM,

Glens Falls. N. Y.

WRITERS WANTED to do copying at home. LAW COLLEGE, Lima, O.

DETECTIVE Men wanted in every county to act as private Detective under instructions. Experience uncoessary. Universal Detective Agency, Indianapolis, Ind.

MAKE MONEY athome. Send 10c. and addresses and particulars. Woman's W. Co. Box 2001, Athens, Ga

#### PLANTS FOR SHADY PLACES.

In a late number of Gardening, quite a number of hardy perennials are noticed by a correspondent, Mr. J. B. Keller, as suitable for shaded or partly shaded positions. These shady places should not be such as are made so by large trees whose roots extend into and impoverish the soil where the plants are set. The condition of shade alone the plants will not resent but even welcome, but they must not be robbed of their soil nutriment.

Adonis vernalis and A. pyrenaica, bearing pretty yellow flowers are said to do better with shade than if in the sun, but a very dry spot is not favorable. Aster alpinus, other conditions being the same, will produce larger flowers in shade than in the full sun.

Geum montanum with large yellow flowers, and G. coccineum fl. pl. with double red flowers, blooming from June to the middle of August, require shade.

Lychnis fulgens and L. Haageana have been proved to do better in a shady spot.

Globularia tricosantha does admirably in a shady place, producing its blue, globular flower heads in June, July and August.

Aquilegias of all kinds prefer shady places, even if the roots of trees may be running through them. But it will be found that these places should be naturally moist.

Delphinium nudicaule, D. Cashmerianum and D. Brunomanum should be grown in partial shade, and are not often seen in perfection when fully exposed to the sun.

Arnebia echioides, a low growing plant with pale yellow flowers in May or June, is adapted to the shade.

Dodecatheon Meadia and D. integrifolia need shade, and absolutely will not do where fully exposed, especially in a rather dry situation. Moïst ground under trees is their preference.

Thalictrum aquilegifolium grows more luxuriantly in the shade than in the sun, and its flowers are much better.

Campanulas as a class do best in the shade, growing larger and producing their flowers freely.

Lobelia cardinalis, L. fulgens and L. syphilitica are best in a shady, moist place.

Inula glandulosa, producing large yellow flowers in July and August, thrives in a dry, shady place, and Inula hirta does equally well under the same conditions.

Waldsteinia fragarioides, hellebore and trilliums are mentioned for shaded portions of a border.

In places deeply shaded and where tree branches hang low down, interfering to some extent with the free circulation of air, but few plants are recommended. The only ones noticed as suitable are primulas, hepaticas and epimediums.

Ourisia coccinea having spikes of showy, large, scarlet flowers, likes a moist, shaded place, where, in most seasons it the fun and pleasure you will have with it.

will bloom "nearly continually all through summer."

Other plants mentioned for shaded places are Saxifraga cordifolia, S. crassifolia, S. purpurea, and S. ligulata. Several of the spiræas, like S. filipendula, S. astilboides and S. palmata have no objection to densely shaded places. Anemone sylvestris is very accommodating, doing well either in sun or shade. Omphalodes verna will do well in all but the heaviest shade. Mertensia Virginica and M. Siberica, both with blue flowers in spring, delight in moist ground in the shade of trees.

#### WOOD ASHES IN POTTING SOIL.

A correspondent of the Gardeners' Chronicle notices the value of wood ashes as manure for different purposes, and among other statements made are

Ornamental foliage stove plants are especially benefited by wood-ashes being mixed in the potting-compost, no material that I have used giving a better colour to the foliage. I have grown Crotons, Dracænas, Palms, Marantas, etc., with and without wood-ashes, and the contrast between those which received woodashes and those which did not was almost incredible. Eucharis grows luxuriantly if wood ashes be mixed with the potting compost; chrysanthemums, roses, carnations, vines and tomatoes, are especially benefitted by frequent top-dressings of wood-ashes. \* \* \* One benefit derived from wood-ashes when mixed with potting mixtures is the length of time during which the soil remains sweet; and if toward the end of the growing period a little of the surface-soil be removed, and a sprinkling of wood-ashes, together with suitable soil afforded the plant, the vigor of the plants will remain unchanged for a considerable length of

#### ARUNDO DONAX AS A FODDER PLANT.

It is stated that a California dairyman who has had forty years experience in the business and experimented with all sorts of grasses, clovers and other fodder plants, had found nothing to equal the Arundo donax for quantity of feed and milk producing qualities. Cut as green feed it would yield as much as 200 tons to the acre. He breaks off an armful of the young shoots when two or three feet high, chops them up with a spade in the feed trough. He states that the increase in the flow of milk, when feeding it, is remarkable. Healso allows his horses and cattle to range through the stubble fields and they thrive on such pasturage. Depending on the arundo for fodder he has not fed a pound of hay in five years to his cattle or horses, excepting a working team.

If you get a club of thirty for this Magazine, you can have one pocket Kokak for yourself and another for a Christmas or birthday present to some friend. Is it not worth the slight labor to get it? Think of

#### A Good Windmill-Make it Yourself.

I saw one of the People's windmills which I saw recommended it your paper recently, it only cost me \$9.40 and is a splendid mill; my well is deep, but it pumps it all right and with very little wind; the neighbors all like it, and as I am a kind of a carpenter, I have agreed to put up nine mills all ready, on which I can make a nice profit, and there are many others for whom I can put up mills this fall. I don't see why every farmer should not have a windmill, when they can make it themselves for less than \*\*10; anyone can get diagrams and complete directions for making the windmill by sending 18 two-cent stamps to pay postage, etc., to Francis Casey, St. Louis, Mo., and there can be dozens of them put up in any locality by anyone who has the energy to do so.

A FARMER.



## B 4 U BY INCUBATORS Send 6 cents for our fine illus-

trated catalogue and poultry book. It's worth poultry book. It's worth \$1 It will pay you man times it's cost. Address...

DES MOINES INCUBATOR CO., Box 72, DES MOINES, IA.



696 New Sample styles of Envelope Styles CARDS, &c., 20 New Songs, 100 Rich Joseph Lands Acoustic Pack Escort Cards, 1 pack F 1 pack Acquaintance Cards and Standard Beau Catcher. ALL for 2 CENTS. CHAMPION CARD WORKS, UNIONVALE, OHIO.

#### WORTH \$10 IN GOLD.



Our Poultry Annual and Book of Valuable Recipes for '97, finely printed in colors, giving cuts, descriptions and prices of 45 of the leading varieties of Fancy Fowls, with important hints on the care of poultry, and hundreds of recipes of great value. Over a 1000 premiums won at the leading shows. Prices Reduced One-fourth. The finest book out. Price only 10c. Will return money if not satisfactory. Address, ERS. box 48 Dakota. III. U.S. A.

C. N. BOWERS, box 48 Dakota, III., U. S. A.



Ladies and Children. This is no toy. Holds 50 eggs. Guaranteed self regulating and to hatch every fertile egg. You can make money with it. Price 85 or will deliver free to any part of U.S. this and a 75 chick Brooder for 88. Buckeye Hatcher sent on 30 days trial, Send 4c for catalog 75. Buckeye Incubator Co., Springfield, 0,

MAKE HENS LAY in the early Fall and in the cold weather of Winter when prices are high. You can do it. of Winter when prices are high. You can do it.

Do you want the Secret? Our New Poultry
Book tells it all. You need it. Sent Free as
Premium with the Wayside Gleanings 3 months for
10 cents. Address, Poultry, Wayside Co., Clintonville, Conn.



RING FREE To introduce our publicagive away absolutely Free to every one answering this advertisement every one answering this advertisement a Rolled Gold Ring. Send 10 cts, stamps or silver also a strip of paper size

stamps or silveralso a strip of paper size of finger and we will send by return mail a first-class story paper for 3 mos. Remember we send all the publications above for only 10 cts. and the ring absolutely free postpaid, Satisfaction guaranteed or money refunded. Address National Illustrated Magazine, Washington, D. C.

#### LANT BOXES PER For HOT-BED USE 1000.

4-inch cube, 41/2-inch cube, or 5-inch cube.

#### BERRY CRATES and CRAPE BASKETS.

Write for price list. Address COLBY-HINKLEY CO., Benton Harbor, Mich.

## "UP-TO-DATE" ALL BRASS.

\$17.00 outfit for \$6.00. Express paid. Will spray a 10-acre orchard per day. 75,000 in use. Satisfaction guaranteed or money refunded. Ill't'd Catalogue and Treatise on Spraying free. Ag'ts wanted. Exclusive territory given. Rapid sellers. Many of our agents are making from \$10 to \$15 per day. P. C. LEWIS MFG. CO., Box126Catskill, N. Y.

## Chichester's English Diamond Brand. NYROYAL PILI Original and Only Genuine. SAFE, always reliable. LADIES ask Druggist for Chichester's English Diamond Brand in

Red and Gold metallic boxes, blue ribbon. Take no other. gerous substitutions and imi Druggists, or send 4c, in stamps Druggists, or send 4c. in stamps for particulars, testimonials and "Relief for Ladles," in letter, by return Mail. 10,000 Testimonials. NamePaper Chichester Chemical Co., Madison Square, Sold by all Local Druggists.

MOTHERS Your Children cured of Incontinence of Urine. Sample free, Dr. F. E. MAY, Bloomington, Illinois.

#### POTATO SCAB.

Potato raisers should take the proper precautions, those which have been well proved, to secure sound tubers free from the objectionable and disfiguring fungus known as the "scab." It is very certain that corrosive sublimate will destroy the fungus on the seed potato. But other measures are also to be used. When scabby potatoes are fed to stock the fungus will retain its vitality after passing through the animal and, finding its way to the manure heap, it is ready to propagate again and infect potatoes planted on the land where employed. To prevent this, boil all scabby potatoes fed to stock, and, to make sure of it, boil all potatoes so fed. Select land for planting where no scabby potatoes have been raised, and if possible change to a new location each year, or plant in view of a long rotation.

Seed potatoes, if showing any scab should be dipped in a solution of corrosive sublimate, an ounce to eight gallons of water. The mode of procedure is as follows: First moisten the sublimate and then dissolve it in two quarts of boiling water, and afterwards add enough more water to make eight gallons. Sixteen gallons of this mixture, containing two ounces of corrosive sublimate, is sufficient to treat fifteen bushels of seed potatoes. Use a tub or barrel; place the potatoes in a bag of coarse sacking and immerse it in the liquid, leaving it for an hour and a half, then lift and suspend and allow it to drain. The potatoes can then be turned out on the floor to dry. In the same manner continue until all the seed has been treated. If it should be necessary to plant on ground where scabby potatoes have been raised, or if the ground should be suspected of containing the fungus, it is a good plan to spray the open furrows with the corosive sublimate solution immediately before planting.

#### THE PAPYRUS AND ITS USE.

A late number of the Journal of Horticulture treats of the papyrus plant, the first known plant from which paper was made by the ancients. This plant formerly was known botanically as Papyrus antiquorum, but now as Cyperus Papyrus. The account given of it is interesting and is as follows:

The celebrated Egyptian papyrus (Papyrus antiquorum), or Egyptian Reed, from which the ancient Egyptians made their paper, still grows in the marshes of Egypt, or in stagnant waters of the Nile. It is also found in Sicily, Syria, and Nubia, and extends even to Senegal. This plant rises, with a triangular stem, to the height of eight or ten feet, and surmounted with a large compound umbel of flowers, having long tiliform involucres, the lower part clothed with long, hollow, sword-shapped leaves, of a brown color. The root-stalks are long and tortuous, four or five inches thick; when young they are sweet and nutritious, and are eaten by the inhabitants; they also yield a fecula, which, with the base of the stems roasted, they use as food,

and they suck their juice in the same way as they do that of the sugar-cane. When old, the root-stock becomes hard and woody, and was converted into cups, moulds, and other utensils; one use of it was to make covers for binding the leaves of the books, which were made of the stem. The whole plant is used for making boats in Abyssinia, a piece of the acacia tree being put in the bottom to serve as a keel. The leaves and the stems have been twisted into ropes, and with the vertical fibres cloth is made. The ancients made their paper from the pellicle found between the pith and bark of the thick part of the stalk, and the plant being called babeer in Syria, this word furnished the appellation Papyrus, from which our word paper is derived. The pellicles were peeled from the stems and cnt into strips of equal length; the strips were placed side by side on a board in sufficient number to form a sheet; other strips were placed side by side in an opposite direction over them, so as to make the sheet sufficiently thick and strong; each sheet was pressed, dried in the sun and polished with a shell or some other substance, and twenty sheets or upwards were glued together to form a roll. The breadth of any roll depended on the length of the strips, and was usually from ten to thirteen fingers broad, and the length depended on the number of the sheets. With the rays of the umbels of the flowers the Egyptians made chaplets for the heads of their gods. Under the arm of a great many of the mummies a small bunch of papyrus is found. It was doubtless of this plant that the "ark of bulrushes" was made in which Pharoah's danghter found the infant



#### PALACE CAR OR HAND CAR.

If you were going on a journey and the P. W. W. F. Co., offered you a reasonable rate over their "Colled Spring Route," splendid service.safety guaranteed—would you take it? Or, to save expense, would you "pump" yourself over the road on a hand car? If you choose the latter, be sure the hand car has the right of way.

PAGE WOVEN WIRE FENCE CO., Adrian Mich.

## Hens

can be made to earn \$1.50 each per year

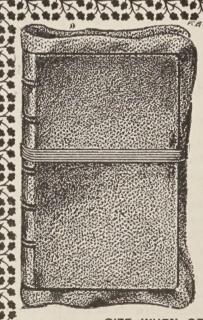
You can learn how 'tis done by studying Farm-Poultry, the best poultry paper. Price 5 cts.; one year \$1.00. Single copy and a 25 ct. book, "A Living From Poultry," sent for 12 cents in stamps. I.S.Johnson & Co., 18 Custom House St., Boston, Mass.

#### Another Smart Woman.

My husband is poor but proud and he does not want meto work; as I have nothing to do I get restless, and after reading in your paper Mrs. Russell's experience selling self-heating flatirons I concluded I would try it. I wrote to J. F. Casey & Co., St. Louis, Mo. and they treated me so nicely that I felt very much encouraged. As soon as I got my sample Iron I started out and sold eight Irons the first day, clearing \$12. I have not sold less than eight any day since, and one day I sold seventeen. I now have \$225 clear money, and my husband does not know I have been working, but I am afraid he will be mad when I tell him. Have I done right, or should I quit work and leave him to struggle alone?

An Anxious Wife.

You are doing just! right, your husband should be proud of you, go right ahead and show the world what an energetic woman can do. That self-heating iron must be a wonderful seller, as we hear of so many that are succeeding selling it.



## BETTER THAN GOLD - -

with its Latest and Best Helps, New Concordance Indexed Maps, sixteen full page Illustrations, Clear Type, fine Paper, French Morocco Flexible Cover, Levant Grain the

# Bagster Teacher's Bible.

SIZE WHEN OPEN, 9 X 121/2 INCHES.

THIS book used by D. L. Moody and many other prominent Evangelists and Ministers. THAT is what IT IS and THIS is WHAT we DO with IT. WE SEND THIS BIBLE, postage paid, together with the UNION GOSPEL NEWS—52 numbers, one full year for only \$1.80; or we will send the BIBLE free for Eight New Subscriptions at 50c. each.

## UNION GOSPEL NEWS is a PROGRESSIVE, WIDE-A-

WAKE, UP-TO-DATE UNDENOMINATIONAL WEEKLY PAPER. If you have not seen it you have missed something of value. Send for sample copy to-day. Address

THE GOSPEL NEWS CO., CLEVELAND, O.

#### A NEW YELLOW RICHARDIA.

A yellow Richardia, hitherto unknown, appears to have been discovered by Mr. Donald Ross, of Cape Town, South Africa, and from plants of it in pots a photograph has been made and sent to the Gardeners' Chronicle, in which is given the following description by the discoverer:

You will notice the bold, vigorous habit, and bright variegation of the foliage. This, combined with the large, deep, golden blooms freely produced, make a plant difficult to surpass in effectiveness. The plants come from a different locality from that in which Richardia Elliottiana and Pentlandi were discovered, and they are in every respect an improvement upon them. I flowered them for the first time last season, the two pots producing sixteen spathes. The same plants now in flower, carry nineteen blooms, one of which has a "double" spathe. The color is the brightest shade of yellow, and the spathes are very large.

The editor adds:

The photograph sent, exhibits two stocky plants with broad leaves set on rather short petioles, regularly spotted over the entire surface of the blade. Spathes as high or higher than the leaves.

No specific name of this plant has yet been published.

#### EUCHARIS CULTURE.

What can be more useful says H. C., in the Journal of Horticulture, than the beautiful Eucharis lily with its pure white flowers, and yet in many places we do not see the plants in a thriving condition. To grow them well a good bottom heat and a stove temperature are indispensible, and if a house can be devoted exclusively to their culture so much the better,

I think a common cause of failure is too frequent potting, as experience teaches me that they are very impatient of being disturbed. Most of the plants in the houses under my charge have not been potted for three years, and they are now the picture of health, some of them in twelve-inch pots throwing as many as ten spikes of flowers.

When the flowering period is over we rest the plants about six or eight weeks, by lowering the temperature of the house a little. The syringe is used among them freely on bright days, and as the power of the sun increases a light shade is given them.

E. amazonica produces an abundance of bloom, and is very useful for making into wreaths. The smaller flowering variety, E. Stevensi, does not flower so freely with us as the first named, but is more suitable for bouquets and lighter floral work.

The mealy bug is a troublesome pest, but can readily be removed by sponging the leaves with an insecticide, used according to the directions given by the vendors.

When packing the blooms for transit, light shallow boxes should be used (sixteen inches by ten inches and two and one-half inches deep we find a convenient size), which ought to be neatly lined with tissue paper, and the flowers placed in rows across the box with layers of wadding between them. Thin twigs the exact width of the box pressed down across the ends of the stems as the packing proceeds keep the flowers in position, and thus reducing the liability of their getting bruised.

#### DISCRIMINATING TASTE.

A reporter of the Washington Star was at a florists' shop and overheard a conversation between a sentimental young lady and an attendant, and these are his

"The chrysanthemums are very nice and large to-day, Miss," remarked the young man who is learning the business.

"No," she said, "I don't care for chrysanthemums. They are so coarse and ostentatious. They seem to be flaunting their charms in your face so persistently that they lose that suggestion of gentle refinement which to me is one of the sweetest attributes of a flower.

"Mebbe you'd like some nice fresh orchids?" said the young man. He had once worked in a dry goods store and was bent on conveying the impression that it was no trouble to show "We have some very pretty designs goods. in orchids."

"Orchids! They are too uncanny. I never care much for orchids, excepting for a little while. A momentary glimpse is fascinating, but there is nothing sympathetic about them.
"We have a lovely article in pinks."

The perfume is oppressive. "Ah, no. remind me, with their elaborately formed petals, of nothing save the vanity of life."

"How would you like some roses?" We make a specialty of roses, and they're on the

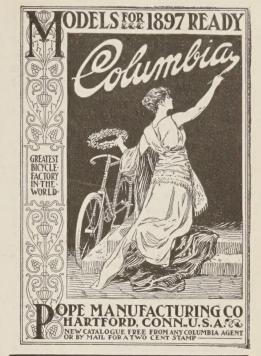
bargain counter for this week only."
"I don't care for roses, either. While pinks suggest pride, roses are to me symbolical of a disdainful hauteur that is no less unworthy.'

"If you want something retiring and quietneat, but not gaudy, so to speak, let me show you our line of violets. Now there is something fine in the way of a violet."

"What memories those flowers revive," she sighed. "They take me back to other days. How touched I was by the fragrance of some violets that were given to me by-by a very dear friend. I cherished the little blossoms. But, alas, I found that they faded."

"Well, Miss," the young man rejoined, in the tone of one whose patience had been sorely tried, "Flowers is flowers. We can guarantee that you're getting as good as there is on the market when you come to us; full size and everything exactly as represented. But we can't warrant 'em"not to fade."

Tell your neighbors and friends about Vicks Magazine and get a Kodak.



#### Churning Done in One Minute.

I have tried the Lightning Churn, you recently described in your paper, and it is certainly a wonder. I can churn in less than one minute, and the butter is elegant, and you get considerably more butter than when you use a common churn. I took the agency for the churn here and every butter, waker that sees it have seed. and every butter-maker that sees it buys one. I have sold three dozen and they give the best of satisfaction. I know I can sell 100 in this township, as they churn so quickly, nake so much more butter than common churns of quickly, make so much more butter than common churns and are so cheap. Someone in every township can make two or three hundred dollars selling these churns. By addressing J. F. Casey & Co., St. Louis, you can get circulars and full information so you can make big money right at home. I have made \$80 the past two weeks and I have never sold anything in my life before. A FARMER.

#### How the Dipper Saved the Farm.

How the Dipper Saved the Farm.

Father was sick and the mortgage on the farm was coming due, I saw in the Christian Advocate where Miss A. M.

Fritz of Station A., St. Louis, Mo., would send a sample combination dipper for eighteen two cent stamps, and ordered one. I saw the dipper could be used as a fruit jar filler; a plain dipper; a fine strainer; a funnel; a strainer funnel; a sick room warming pan and a pint measure.

These sight different was makes the dipper were a peece. These eight different uses makes the dipper such a necessary article that I went to work with it and it sells at very near exery house. And in four months I paid off the mortgage. I think I can clear as much as \$200 a month. If you need work you can do well by giving this a trial. Miss A. M. Fritz, Station A. St. Louis, Mo, will send you a sample for eighteen two cent stamps—write at once. John G. N.



## Our Offer for 1897

### 10 Cents

For a Three Months trial subscription to

### BUDGET

A high-class illustrated magazine containing Music, Illustrated Stories, Fashions and Topics of the Day.

All of the music and reading matter is by the best composers and writers. Send silver or stamps to

Budget Publishing Co.. OHO. SANDUSKY,

WRITE FOR SAMPLE COPY.

#### CULTURE OF HERBACEOUS CALCEOLARIAS.

Some experience gained by the cultivation of these plants enables A. F. L., to give a few details regarding their treatment in a late number of the Journal of Horticulture. A well drained pan, thoroughly clean, nearly full of the following mixture-Loam (good), two parts, leaf mould, one part, coarse sand, one part.

The seed was sown about the middle of June, covered lightly, the pan being then placed on on inverted pot which was standing in another receptacle containing water to prevent slugs from injuring the seedlings, in a cold frame. As soon as large enough the seedlings were potted in 60's (three-inch), using the same kind of soil as before; they were then placed on a shelf near the glass in the greenhouse. When the plants were ready for another size pot 48's (four and one-half inch), it was given them, using one-sixth part of old mushroom bed refuse in addition to the soil mentioned above. Plants in this size pot proved very useful for vases, the others being grown in 32's (six inch).

A little stimulant, such as sheep manure water, helps them considerably, especially when throwing up their spikes. Use no more heat than is absolutely necessary; in fact, if the temperature is at freezing point it will not hurt the plants. Keep the surroundings moist, and shade a little when the sun is strong, or they will drop their foliage. Keep a sharp eye for slugs and green fly, and with careful attention you will see on the margins of the leaves drops of water, which is sufficient to say you can manage one of the best of our greenhouse flowering plants.

The pocket Kodak which we send as a premium for fifteen new subscribers will photograph babies, children, old people, flowers, gardens, and all sorts of animals. We give a handsome prize of \$25 for the best picture and \$10 for the second best. The photos to be reproduced in the Magazine.

Sixty-one Prizes, aggregating \$500. A Genuine Bona Fide Offer. We give nothing but cash for prizes. No trash Here is our proposition: Who can form the greatest number of words from the letters in INSTRUCTION? You can make twenty or more words, we feel sure, and if you do you will receive a good reward. Do not use any letter more times than it appears in the word. Use no language except English. Use any dictionary. Plurals, prono ns. nouns, verbs, adverbs, prefixes, suffixes, adjectives, prorer nouns, allowed. Anything that is a legitimate word will be allowed. Work it out in this manner. INSTRUCTION. In, Tin, Ton, Sin, Son, Sir, Scion, Run. Us, etc. The publisher of Woman's World Ann Jenness Miller Monthly will pay \$100.00 in gold to the person able to make the largest lists; \$20.00 to each of the next three; \$10.00 to each of the next three; \$10.00 to each of the next three; \$10.00 to each of the next forty largest lists. Don't you think you could be one of these sixty-one! You will enjoy the making of your list. Why not try for the first prize! The above rewards are given free and without consideration for the purpose of attracting attention to our handsome woman's magazine, thirty two to thirty-six pages, each page containing four long columns, finely illustrated, and all original matter, long and short stories by the best authors; price \$1.00 per year. It is necessary for you, to enter the contest, to send 25 cents (money-order, silver or stamps) for a three-months' trial subscription with your list of words, and every person sending the 25 cents and a list of twenty words or more is guaranteed an extra present by return mail (in addition to the magazine), of a 100-page book, "Beside the Bonnie Brier Bush," by the famous Ian Maclaren. This book has attracted more attention in the United States than any book of recent years. We give a complete unabridged edition, handy size, finely printed in handsome type. Satisfaction guaranteed in every case or money refunded. Lists should be sent at once, and not later t

When writing to advertisers, mention Vick's Magazine.

CONTENTS. Arundo Donax as a Fodder Plant
Asparagus, Planting and Care of
Beets, Notes on
Book Notes
Turkeys and How to Grow Them; The
American Fruit Culturist; An Illustrated
Flora of the Northern Unitefl States;
Eleventh Report of the New York State
Entomologist. Eucharis Culture Fruit Wanted, More Groundsel Tree, The Japanese Plants, Some Valuable Groundsel Free, The
Japanese Plants, Some Valuable
Letter Box
Cutting Young Asparagus; Chinese Printose in Oregon; Chinese Lily or Narcissus; Wallflower; Geraniums not Blooming; Ipomæa palmata; Columbian Raspberry; Chinese Lilies; Gathering Sweet Peas; Aphis—Kerosene—Emulsion—Rose Site—Canna; Tuberous Begonias.
Lobelia cardinalis
Notes, an Amateurs
What Ails the Agave?; Rubber Tree; Aphis on Farfugium; The Madeira Vine, A Bed of Cassia; What was it?
Orchids, Collecting
Pacific States Fruit Culture
Papyrus, The, and Its Use
Peas as an Orchard Crop
Plants as Foster Mothers
Plants for Shady Places
Potato Scab. Polato Scab
Radish, An Early Forcing
Richardia, A New Yellow
Rock Garden, A Wellesley
Seeds, Sowing Some Kinds of
Spice Bush or Calyauthus
Strawberry Plants, Pedigree
Trees and Flowers, Native, of North Georgia
Tuberose, How I Raise the
Wood Ashes in Pottery

Shall we count on you as a helper? We want to reach the 500,000 mark this year. Get up a club among your neighbors. See premium offers.

Have you seen.....

the new bicycle,

the "Duquesne Special"?

It is one of the most talked-about machines of the year.

New ideas—new methods; the perfection of style.

Essentially a gentleman's

Catalogue tells all; Free by mail.

Duquesne Manufacturing Co.,

Pittsburg, Pa.

Makers of distinctively High Grade Bicycles.

Branches—Boston, New York, Philadelphia, Pittsburg, Chicago, Denver.



If you intend to build it will pay you to have PAYNE'S PORTFOLIO OF PLANS.

Pages 9 x 12 inches.

A most practical book for prospective builders. Contains about 100 plans of Modern Homes actually erected, in various localities. Photographic and perspective views, interiors and complete dscription. Actual costs in locality where built. Owner's name and testimonials, and practical suggestions for the economical building of Modern Homes. Price \$1.00 postpaid. Illustrated circular and testimonials free. Small pamphlet of 30 designs 25 cts. Address

VICKS MAGAZINE, Rochester, N. Y.



DAIK TEIRLERUE any business man of this town, and to the thousands using our intents in their homes. A book of testimonials sent with every catalogue, As an advertise-we will sell the first Piano in a place for only \$160. Organs from \$25 upwards, 1806, &c., FREE. If you want to buy on instalments, BUT DON'T BUY UNTIL YOU Write US. BEETEOVEN PIANO & ORGAN CO.,

P. O. Box 802 WASHINGTON, N. J.

They have been before the public since 1849, and need no introduction to the older generation of seed-buyers. If YOU need anything in the line of Farm, Garden, or Flower Seeds, we want you to write for VICK'S FLORAL CUIDE our Standard Seed and Plant Catalogue. VICK'S FLORAL CUIDE Contains all that's new and good-always reliable. Will send the Gulde and your choice of one packet either Wonderful Branching Aster, New Japan Morning Glory, or Pansy Choice Mixed, for only two packets, 25 cts.; three packets, 30 cts. Retail price of seeds alone 45 cts.

VICK'S ILLUSTRATED MONTHLY MAGAZINE and Vegetables, and is up to date on these subjects, for 3 months, the Gulde and One Packet of Seeds (named above) for 25 cents. When ordering state where you saw this adv. and we will send a packet of FLOWER SEEDS FREE-Write us to-day. JAMES VICK'S SONS, ROCHESTER, N. Y.